

CLAIMS:

1. A kit, comprising arsenic trioxide and instructions for the administration of said arsenic trioxide to a patient diagnosed with acute promyelocytic leukemia, comprising delivering a therapeutically effective dosage amount of said arsenic trioxide, wherein said amount is based upon the weight of said patient, for a maximum of 60 days or until bone marrow remission, which constitutes a first administration.

2. The kit of claim 1, further comprising instructions for a second administration of said arsenic trioxide, wherein said second administration comprises a therapeutically effective dosage amount of arsenic trioxide for 25 doses.

3. The kit of claim 2, wherein further comprising instructions wherein said second administration is administered 3 to 6 weeks after said first administration.

4. The kit of claim 3, further comprising instructions wherein said second administration is administered for up to five weeks.

5. The kit of claim 4, further comprising instructions wherein said second administration is administered at five doses per week.

6. The kit of claim 2, further comprising instructions for repeating said second administration.

7. The kit of claim 6, further comprising instructions wherein said second administration is repeated every 3 to 6 weeks.

8. The kit of claim 7, further comprising instructions wherein said second administration is repeated until a total of between two and ten cycles of said second administration are completed.

9. The kit of claim 8, further comprising instructions for repeating said second administration until a total of two cycles of said second administration are completed.

10. The kit of claim 8, further comprising instructions for repeating said second administration until a total of ten cycles of said second administration are completed.

11. A kit, comprising arsenic trioxide and instructions for the administration of said arsenic trioxide to a patient diagnosed with acute promyelocytic leukemia, comprising delivering a therapeutically effective dosage amount of said arsenic trioxide once a day wherein said amount is based upon the weight of said patient, for a maximum of 60 days or until bone marrow remission, wherein said administration constitutes a first administration.

12. The kit of claim 11, further comprising instructions for a second administration of said arsenic trioxide, wherein said second administration comprises a therapeutically effective dosage amount of arsenic trioxide once a day for 25 doses.

13. The kit of claim 12, wherein further comprising instructions wherein said second administration is administered 3 to 6 weeks after said first administration.

14. The kit of claim 13, further comprising instructions wherein said second administration is administered for up to five weeks.

15. The kit of claim 14, further comprising instructions wherein said second administration is administered at five doses per week.

16. The kit of claim 12, further comprising instructions for repeating said second administration.

17. The kit of claim 16, further comprising instructions wherein said second administration is repeated every 3 to 6 weeks.

18. The kit of claim 17, further comprising instructions wherein said second administration is repeated until a total of between two and ten cycles of said second administration are completed.

19. The kit of claim 18, further comprising instructions for repeating said second administration until a total of two cycles of said second administration are completed.

20. The kit of claim 18, further comprising instructions for repeating said second administration until a total of ten cycles of said second administration are completed.